

# Inside IEMA

Monthly Newsletter

Illinois Emergency Management Agency

December 2016

## From IEMA Director James K. Joseph

There's an old saying that "time flies when you're having fun." With only a few days until we ring in the New Year, it certainly seems like 2016 has flown by, and I can affirm that it was, indeed, an enjoyable, productive year.

Even before revelers rang in the New Year, emergency managers in many parts of the state were dealing with unprecedented winter flooding. The flooding and subsequent recovery activities kept IEMA personnel and many local emergency managers busy well into 2016.

As the floodwaters receded, staff from FEMA, IEMA and local emergency management agencies braved frigid temperatures to document flood impacts to support the state's request for federal assistance. While that request and an appeal were both denied, we did secure assistance through the U.S. Small Business Administration to help some people and businesses secure low-interest loans to help with recovery.

Beyond the New Year's flooding, 2016 saw few major disasters. In June, several tornadoes touched down across northern Illinois. Most occurred in relatively rural areas, so property damage and injuries were much less than could have been experienced. In addition, the Illinois State Fairgrounds experienced flash flooding in August that damaged or destroyed dozens of vehicles and trailers. Thanks to coordinated efforts among several state agencies, the fair was open the next morning for visitors.

IEMA Deputy Director Joe Klinger has a philosophy that we experience more disasters in odd-numbered years than in even-numbered ones. While 2016 was a relatively calm year for disasters in Illinois, I'm personally hoping Joe is wrong and that 2017 will once again bring few disasters! However, as we all know, we may hope for the best, but we have to prepare for the worst. During 2017, the IEMA staff and I pledge to continue providing you with the support you need to be prepared for whatever disaster may affect the people and communities you serve.

On behalf of everyone at IEMA, I wish you the happiest of holidays and a healthy, wonderful New Year!



**Director Joseph, his wife Shana and children Eli and Caleb wish you a very happy New Year.**

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# Local, County EMAs Get New Coordinators in 2016

Eleven new county and local emergency management coordinators assumed the helm of their respective accredited agencies in 2016. Please join us in welcoming them to the emergency management family in Illinois. New coordinators include:

**Michael Dacey**, Lake County EMA  
(not pictured)

**Ed Francis**, Jasper County EMA  
(not pictured)

**Mike Hardy**, Schuyler County ESDA

**Randy Heisch**, Rock Island County ESDA  
(not pictured)

**Ed Kemper**, Village of Palatine EMA

**Greg Nimmo**, Montgomery County EMA  
(not pictured)

**Josh Martin**, Pike County EMA

**Brad Midgett**, Crawford County EMA

**Don Schmidt**, Stark County ESDA

**Alicia Tate-Nadeau**, Chicago OEMC  
(not pictured)

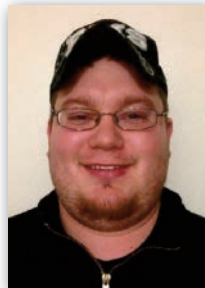
**John Taylor**, Hamilton County EMA



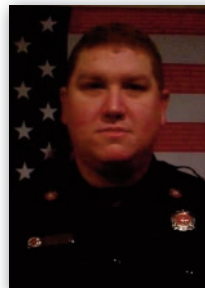
**Mike Hardy**



**Ed Kemper**



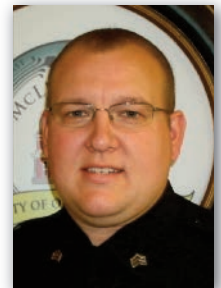
**Josh Martin**



**Brad Midgett**



**Don Schmidt**



**John Taylor**

## Preparedness is Key to Surviving Illinois Winters

Although winter didn't officially start until Dec. 21, much of the state already has experienced the snow, ice and frigid temperatures associated with winter in Illinois. With nearly three months of winter remaining, IEMA recommends taking steps now to ensure you're prepared to stay safe and warm throughout the season.

Driving on snow or ice-covered roads can be extremely hazardous, so it's important to equip yourself with knowledge and items to help you stay safe. Before starting a trip during bad weather, check road conditions on the Illinois Department of Transportation's Winter Road Conditions Map at [www.gettingaroundillinois.com](http://www.gettingaroundillinois.com).

During hazardous winter conditions, drivers often find themselves stranded along the roadside while they wait for assistance, which may take hours to arrive. That's why it's important to equip your vehicle with an emergency supply kit stocked with such items as:

- ✓ Blankets or sleeping bags

- ✓ Flashlight with extra batteries
- ✓ First aid kit
- ✓ Non-perishable snack food
- ✓ Water
- ✓ Sand or cat litter
- ✓ Shovel
- ✓ Booster cables
- ✓ Cell phone charger

Winter storms also can cause power outages that can last several hours or several days. It's important to have an emergency supply kit at home that includes a battery-powered National Oceanic and Atmospheric Administration (NOAA) weather radio, water and non-perishable food, flashlights and extra batteries, a first aid kit and supplies for pets and family members with special medical needs.

More tips for staying safe at home and on the road are available in a guide developed by IEMA and the National Weather Service, which is available on the Ready Illinois website at [www.Ready.Illinois.gov](http://www.Ready.Illinois.gov).

# First Liquid Nitrogen Generator Installed at Nuclear Plant

For nearly 30 years, Illinois' Remote Monitoring System has collected data inside nuclear power reactors, in the effluent stacks and in a two-mile radius around each nuclear plant in the state. This information is continuously fed to IEMA's computer system in Springfield, where it is monitored 24 hours a day, 365 days a year.

During an incident at one of the plants, the data would be analyzed by the agency's reactor and health physics experts to determine actions to protect the public from exposure to radiation.

Radiation detectors within the Gaseous Effluent Monitoring System (GEMS) must be cooled continuously by liquid nitrogen. Until recently, this involved weekly deliveries of 160-liter liquid nitrogen tanks to each of the six operating nuclear power plants in the state.

In addition to costing the agency more than \$90,000 each year, these weekly deliveries required an IEMA technician to be on-site to manually disconnect and connect the tanks. The deliveries also were required to go through time-consuming security inspections at the plant entrance.

That cumbersome and expensive process is changing thanks to an innovative project to purchase, test and install liquid nitrogen generators at each of the plants. The units take nitrogen from room air and liquefy it at -196 degrees Celsius.

The project involved considerable research by IEMA staff in order to develop bid specifications. The first unit was delivered to Springfield in August. Staff then worked with the vendor to make software changes,



**IEMA staff modified the generator before it was installed at the Byron Nuclear Power Station.**

recalibrate the pressure relief valve, install a more precise pressure regulator, relocate the panel of valves from rear to front and create control software for nighttime-only operations.

Testing was completed and the first unit was installed at the Byron Nuclear Power Station in November. Other units will be delivered and installed at the remaining five nuclear power stations in early 2017. The total project cost is approximately \$290,000.



Assistant Director Joe Klinger (center) recently met with officials from the U.S. Department of Homeland Security (DHS) regarding the Chemical Facility Anti-Terrorism Standards (CFATS), which authorizes DHS to regulate chemical facilities that present high levels of security risk. Also pictured are (from left): Scott W. Fixmer, DHS Chemical Security Inspector; Kevin Pennell, DHS Protective Security Adviser; Kathryn Young, DHS Chief of Regulatory Compliance; Chad Finin, DHS Chemical Security Inspector; and Cheryl Louck, DHS Security Chemical Inspector. Fixmer, Young, Finin and Louck are all with DHS' Infrastructure Security Compliance Division. Public Safety Director Rodger Heaton also participated in the briefing. More information about CFATS is available at <https://www.dhs.gov/critical-infrastructure-chemical-security>.



## Senior Staff Spotlight: Adnan Khayyat

When he was a child, Adnan Khayyat's stay-at-home mother spent hours cooking and doing scientific experiments with her four young boys while his father worked as an engineer for the Illinois Department of Transportation. Decades later, as the chief of IEMA's Bureau of Radiation Safety, he credits his mother for igniting his interest in science and his father for instilling in him the importance of public service.

A self-described 'science geek,' Khayyat received his bachelor's and master's degrees in chemistry from Southern Illinois University at Edwardsville and was recognized as the Outstanding Senior Chemistry Student and Outstanding Graduate Student in Chemistry.

Khayyat joined the Illinois Department of Nuclear Safety in 1999 as a chemist in the agency's radiochemistry laboratory, where he performed analyses of drinking water and environmental samples. He later developed scientific exercise scenario data and controlled exercises involving the agency's Radiological Task Force as it prepared for response to a nuclear power plant accident.

In 2012, Khayyat was appointed chief of the Bureau of Environmental Radiation Safety. A year later, the bureau merged with another to form the Bureau of Radiation Safety, which manages approximately 20 programs that protect public health and safety and the environment from unnecessary exposure to naturally occurring and manmade radiation.

The bureau's nearly 60 employees respond to radiation incidents, collect and analyze environmental samples for radioactivity, inspect and escort spent fuel shipments, oversee cleanup projects at radioactively contaminated sites, regulate the use of radioactive materials, ensure the safety of x-ray and mammography procedures, promote radon awareness, and more.



**Bureau of Radiation Safety Chief Adnan Khayyat**

For 10 years, Khayyat also served as an adjunct instructor for chemistry and math at Lincoln Land Community College in Springfield.

Khayyat has contributed to several state and federal radiation safety efforts, including participation in the Interagency Coordinating Committee on Groundwater, the Executive Steering Council for the U.S. Department of Homeland Security's Domestic Nuclear Detection Office, the national Radiation Legal Preparedness Committee, and the National Alliance for Radiation Readiness Laboratory Prioritization Taskforce.

While he never envisioned leading a bureau when he started with the state 18 years ago, Khayyat said it's exciting to have the opportunity to work with a dedicated team of scientists shaping policies and programs that help people throughout the state.

Khayyat is a Springfield native, where he still resides with his son Will.

### 2017 Monthly Preparedness Themes

<b>January</b>	Resolve to be Ready	<b>July</b>	Heat Safety
<b>February</b>	Earthquake Preparedness	<b>August</b>	School and Campus Safety
<b>March</b>	Severe Weather Preparedness	<b>September</b>	National Preparedness Month
<b>April</b>	Volunteers in Preparedness and Response	<b>October</b>	Cybersecurity Awareness
<b>May</b>	Functional Needs Preparedness	<b>November</b>	Winter Weather Preparedness
<b>June</b>	Pet Preparedness	<b>December</b>	Holiday Safety

## Illinois Participating in Earthquake Planning Effort

FEMA Regions IV, V, VI and VII, in coordination with the states of Alabama, Arkansas, Illinois, Indiana, Kentucky, Missouri, Mississippi and Tennessee, have begun an 18-month program to update their New Madrid Seismic Zone (NMSZ) plans. This effort will address the next level of earthquake planning, building on past planning efforts and incorporating new efforts intended to enhance federal and state response and recovery actions in the event of a catastrophic earthquake in the NMSZ.

A key component of this initiative will be active partnership and collaboration by government agencies, business, industry and voluntary organizations, and scientific and academic institutions in an effort to include input from, and address the needs/concerns of, the broadest possible range of stakeholders.

Current federal NMSZ plans address only response actions up to 72-120 hours and require revision to include traditional recovery programs, recovery core capabilities and updates to response core capabilities. As a result of the new initiative, plans will contain initial response and recovery information including concept of operations and associated tasks for all phases as described in the FEMA Operational Planning Manual. Plans also will incorporate National Disaster Recovery Framework principles and address

federal post-Hurricane Sandy policy and response and recovery updates.

The composite scenario used to develop the planning factors for the NMSZ plan update is derived from modeling by the Mid-American Earthquake Center based on the impacts of the historic series of earthquakes in 1812. With these factors as a basis, the new plans will truly be reflective of a catastrophic, worst-case event.

To help coordinate the planning effort, FEMA has contracted with the global consulting firm IEM to place a dedicated earthquake planner in each of the NMSZ states as well as the four FEMA regional offices involved. As a result, IEMA last month welcomed IEM contractor James Calder, who will work with IEMA's planning cell for the duration of the NMSZ initiative.

A West Point graduate, Calder also holds a master's degree from the University of Louisville and is a candidate for a second master's degree from American Public University. Active in various planning and training positions since retiring from the U.S. Army as a Lieutenant Colonel, Calder's experiences with IEM include working on the development of the Regional Response Plan for a catastrophic terrorist attack in FEMA Region I (Boston).

## Will County Debris Management Plan Approved by FEMA

Will County recently became the first county in Illinois to have a debris management plan approved by FEMA. As a result, the county will receive a one-time incentive of a two percent increased cost share adjustment for the first 90 days of debris removal activities. That means the cost share for Will County's next disaster could be 77 percent federal to 23 percent local if they choose to use the incentive at that time.

The 90-day period will begin the first day of the county's presidentially declared incident period.

Will County successfully met all of the program's requirements, including identifying its procurement method for selecting a post-disaster contractor for cleanup services. This action will speed the debris removal process and expedite the FEMA

reimbursement process.

One of the county's greatest strengths that contributed to the plan's approval was forecasting the type and quantity of debris. The plan identified the types and severity of disasters that are most likely to occur along with the types and anticipated quantities of debris that may be generated.

IEMA's Public Assistance staff supported Will County's efforts for approval of the debris management plan and is available to provide guidance to other counties interested in seeking plan approval. The Public Assistance staff can be reached at [PA.grants@illinois.gov](mailto:PA.grants@illinois.gov).

A copy of Will County's debris management plan is available at <https://goo.gl/O8zz9c>.



# IEMA Provides Radiological Support for Drill

Response personnel from the Urban Search and Rescue Illinois Task Force 1 (IL-US&R TF-1), the Mutual Aid Box Alarm System (MABAS), the Illinois Medical Emergency Response Team (IMERT) and IEMA recently joined forces to practice response and rescue in a scenario involving a suspected terrorist attack using a Radiological Dispersal Device (RDD).

The mobilization exercise was conducted Nov. 9-10 in Cherry Valley. As the scenario began, a local first responder equipped with a Personal Radiation Detector (PRD) received elevated radiation readings upon arrival at the scene of an explosion that resulted in collapse of a parking structure, which trapped people inside their vehicles. The explosive device was then suspected to be a RDD, which likely spread radioactive materials throughout the area.

The local incident commander then requested state assistance, including the IL-US&R TF-1, MABAS, IMERT and IEMA. In addition to structural stability, rescuers needed to factor in the hazards presented by the radioactive contamination as they planned rescue and recovery of victims. They worked with hazardous materials (HazMat) team members for threat assessment (including isotope identification),

mitigation of identified hazards, appropriate decontamination and the completion of their rescue mission.

Coordination is key for safe, effective response. HazMat personnel were required to make appropriate notifications, create a site safety plan and coordinate with outside agencies, such as IEMA and IMERT, for the mitigation, decontamination, patient management and termination of the hazardous materials element.

IEMA personnel provided just-in-time training for the search and rescue and HazMat team members on use of their PRDs and Radio Isotope Identification Devices. IEMA also assisted team members as they conducted radiological surveys of injured victims at the decontamination station, and played the role of IEMA radiological liaison for the incident.

The exercise provided IL-US&R TF-1 team members with an opportunity to use and become more comfortable with their radiation detection and monitoring equipment. It also tested the process for requesting IEMA assistance and receiving help from the agency's radiation duty officer.



**Search and rescue team members work to stabilize a concrete slab before extracting a simulated victim from a crushed vehicle (left), conduct a radiological survey on a patient (middle) and use a PRD and a four gas monitor to check for environmental hazards before cutting into the collapsed structure (right).**

## 2017 CERT Challenge to Focus on Recovery Activities

*Challenging Recovery* is the theme for the seventh annual Prairie State Community Emergency Response Team (CERT) Challenge, which will be held Saturday, March 25, 2017, at Joliet Junior College in Joliet.

Rather than team challenge activities that took center stage at previous CERT Challenges, the 2017 event will provide training focused on disaster recovery activities, such as damage assessment, donations management, spontaneous volunteers and Multi-Agency Resource Centers. These training topics reflect activities CERT members have assisted with following several recent disasters and are likely to assist with in future emergencies.



The CERT program is part of the national Citizen Corps Program. More than 70 jurisdictions in Illinois are part of the Citizen Corps Program, and nearly 50 of those participate in the CERT training program.

Online registration for the CERT Challenge will be available in mid-January and is limited to the first 132 registrants. Participants must supply their CERT sponsorship, CERT leader

information and confirm they have completed the 20-hour CERT training. Email notifications will be sent to each CERT program when registration has begun.

The event is sponsored by IEMA and hosted by Will County Emergency Management Agency.

## Torres Completes Rigorous ASME Training

Nuclear Safety Engineer Dr. Luisa Torres recently completed 14 months of rigorous training and successfully passed the examination required to be an inspector in IEMA's American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code Compliance Program. The program ensures pressurized systems at nuclear power plants in Illinois meet all state and federal standards and the ASME Code.

IEMA's inspections of these systems are conducted under a Memorandum of Agreement with the Office of the State Fire Marshal, which provides IEMA with jurisdiction over all boiler and pressure vessels within nuclear facilities in the state, as well as a Memorandum of Understanding with the U.S. Nuclear Regulatory Commission (NRC) to collaborate with in-service inspections during refueling outages.

To attain qualification as an IEMA ASME Inspector, Torres had to complete several courses, including the ASME Boiler and Pressure Vessel Code, Section III, Rules for Construction of Nuclear Facility Components; New Construction Authorized Inspector; and Authorized Nuclear In-Service Inspection.

Torres also cross-trained with the NRC on Probabilistic Risk Assessment Basics for Regulatory Applications;

conducting inspections; field techniques and regulatory processes; Westinghouse pressurized water reactor systems overview; and General Electric boiling water reactor design.

In addition, she participated in emergency action level training and Illinois Plan for Radiological Accidents exercises in order to qualify as an Emergency Operations Facility liaison, the Northern Technical Response Center manager and a reactor assistant in IEMA's Radiological Emergency Assessment Center.

The agency's ASME code compliance program also conducts ASME surveys and reviews of organizations requesting certificate of authorization for construction and/or repair and installation of nuclear components. During her training, Torres participated in surveys of two companies in Illinois.



**Assistant Director Joe Klinger presented a certificate to Luisa Torres in recognition of her completion of the ASME training and examination.**





Staff from IEMA and the Office of the State Fire Marshal recently toured the Mutual Aid Box Alarm System (MABAS) Readiness Center in Wheeling, where they were briefed by MABAS CEO Chief Jay Reardon on MABAS assets and personnel that can be deployed to assist with disaster responses anywhere in Illinois or around the county (as part of an Emergency Management Assistance Compact request). At left, Assistant Director Joe Klinger listens as Chief Tim Littlefield, MABAS planning section chief, describes MABAS capabilities.



IEMA's nearly 200 employees participated in one of three end-of-year meetings recently. Two meetings were conducted at IEMA's headquarters in Springfield, while employees in the northern part of the state attended a meeting at the Bensenville Emergency Management Agency facility. The meetings provided an opportunity for staff members to hear about agency-wide initiatives during 2016, as well as plans for the coming year.

**Previous issues of Inside IEMA are available at:**  
<http://www.illinois.gov/iema/Info/Pages/Newsletters.aspx>.



**State of Illinois**  
 Illinois Emergency Management Agency

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